# SOUTHERN SHIPBUILDING LOUISIANA

EPA ID# LAD008148015

### **EPA REGION 6**

CONGRESSIONAL DISTRICT 01

St. Tammany Parish Slidell

Updated: 6/6/96

# **Site Description**

### Location:

- The site is at the location of the former Southern Shipbuilding Corporation, a barge cleaning, building, docking and repair facility, within St. Tammany Parish, Slidell, Louisiana.
- The site is located on 54 acres at 999 Canulette Road, just down stream of the U.S. Highway 433 bridge and adjacent to Bayou Bonfouca, approximately 1.5 miles downstream of the Bayou Bonfouca Superfund site.

### Population:

• Approximately 26,000 residents live in the surrounding community.

### Setting:

- Nearest residence potentially impacted by the site is approximately 400 feet from the site, to the southwest.
- Nearest drinking water well is approximately 1/4 mile southwest of the site.
- The southeast portion of the site is heavily wooded.
- The site is bordered on the north and east by Bayou Bonfouca, on the south by Canulette Road and on the west by Bonfouca Road.
- The contaminants have been found in the bayou.

### Hydrology:

- A uniform clay layer was found to underlie the impoundments and most of the site.
- A contaminated saturated zone exists above the clay layer and ground water movement is toward the bayou in a northwest direction.
- Another water bearing unit referred to as the upper confined aquifer, which has not been contaminated by the impoundments, was found below the clay and flows to the south.

### Wastes and Volumes

- PITS- 35,000 cubic yards of sludges highly contaminated with polycyclic aromatic hydrocarbons (PAH's) are in several pits and lagoons, comprising about 8 acres.
- GRAVING DOCK- Sediment contains tri-butyl-tin (estimated 3,000 cubic yards) from decades of hull repair.

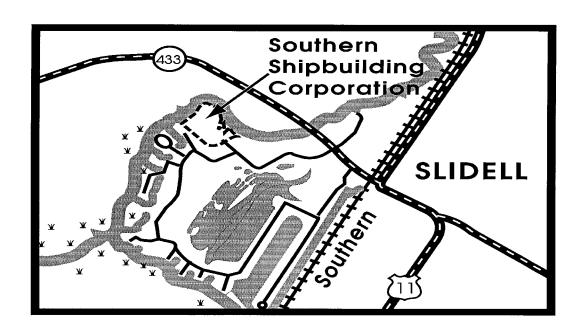
- PROPERTY- The facility comprises 53 acres with a wide variety of "hot spots," including: explosive/volatile paints, soils contaminated with elevated levels of metal contaminants such as lead and copper, polychlorinated biphenyls (PCB) contaminated soils.
- BAYOU- contamination from pits and graving dock have been released into the bayou although concentrations are below cleanup levels.

# Site Assessment and Ranking

### NPL LISTING HISTORY

Site HRS Score: 50.00 Proposed Date: 2/13/95 Final Date: 5/26/95 NPL Update: No. 18

# Site Map and Diagram



### The Remediation Process

### Site History:

- A shipbuilding plant began operating at the site in 1919 under the direction of Canulette Shipbuilding. In 1954, Canulette Shipbuilding sold the business to J & S Shipbuilding. Records of the site operations by either of these companies are unavailable.
- In 1957, Southern Shipbuilding Corporation purchased the property from J & S Shipbuilding. Southern Shipbuilding Corporation ran the facility from 1957 until 1993, during which time it performed gas freeing, building, docking and repairing operations.
- The results of EPA's and the Louisiana Department of Environmental Quality's (LDEQ's) investigative efforts in late 1992 and early 1993 provided evidence that the site posed significant human health and environmental threat.
- During the summers of 1993 and 1994, EPA conducted emergency removal actions to provide additional freeboard within the surface impoundments.
- The removal actions consisted of pumping contaminated water from the surface impoundments, treating it through sand and activated carbon filtration and discharging the treated water to Bayou Bonfouca.
- In February 1995, sheet piling was driven along the edge of the waterway to prevent catastrophic failure of the existing levee.
- In April 1995, a removal action took place which consisted of off site disposal of numerous containers of paints, solvents and other chemicals from the building referred to as the "paint shed."
- The investigations showed four types of contamination concerns remaining at the site:
  - 1) Slightly contaminated surface and subsurface soil in proximity of the impoundments area extending from the surface down to about 10 feet;
  - Highly contaminated sludges and soils of the impoundments and over flow areas, and soils in close proximity to these areas;
  - 3) Sediments within and immediately near the graving dock (dry dock); and
  - 4) Slight contamination in sediments of Bayou Bonfouca.

### **Health Considerations:**

• The pits and hot spots at this site all contain highly toxic materials. The property is not safe for human habitation nor is it usable in current state for commercial enterprise. Human health threats also exist for recreational users of the Bayou.

• Flooding has occurred in the area and residents along the Bayou have complained that contaminants from the site have been deposited on their residential properties.

### Other Environmental Risks:

- Sediments in and around the graving dock are contaminated with tributyltin (TBT), an anti-fouling paint additive, and an extremely powerful toxin.
- Catastrophic failures of the levees have occurred releasing pit contaminants into the Bayou.
- The Site was divided into two Operable Units (OUs): OU 1 comprises the surface impoundments and graving dock, OU 2 comprises the remaining approximately 45 acres. Hot spot removal actions in OU2 were completed in June 1996.

### Record of Decision -

Signed: July 20, 1995 (OU #1)

- The Southern Shipbuilding Superfund site remedy includes:
- Off site incineration of site pit wastes (at nearby Bayou Bonfouca site)
- Consolidation/capping of soils on site not addressed by incineration
- Consolidation/capping of incinerator ash on site
- Removal and incineration of tributyltin-contaminated sediments from the graving dock

# Community Involvement -

- Community Involvement Plan: Developed 01/95
- Open houses and workshops: 08/94, 12/94, 02/95, 02/95, 1/96, 2/96, 3/96
- Community Advisory Group Meetings: 12/94, 01/95, 02/95, 04/95
- Original Proposed Plan Fact Sheet and Public Meeting: 03/95
- Original ROD Fact Sheet: 7/31/95 (Operable Unit 1)
- Milestone Fact Sheets: Update 07/94, 09/94, 9/96
- Citizens on site mailing list: 253
- Constituency Interest: High interest at site.
- Site Repository: St. Tammany Parish Library, Slidell Branch, Slidell, Louisiana

### **Technical Assistance Grant**

• Availability Notice: 01/95, 02/95

• Letters of Intent Received: Slidell Working Against Major Pollution (SWAMP), 01/23/95;

Earth Beautiful Foundation, 01/20/95 (subsequently withdrawn)

Draft Application Received: 5/29/95
Final Application Received: 12/15/95

- Grant Award: 12/15/95
- Current Status: SWAMP hired Joel Hirschhorn and Wilma Subra as Technical Advisors on 6/17/96 to review of site documents prior to release of the final proposed plan of action.

# Fiscal and Program Management -

- Remedial Project Manager (EPA): Mark Hansen, 214-665-7548, Mail Code: 6SF-L
- State Contact: Duane Wilson (LDEQ), (504) 765-0463
- Community Involvement Coordinator: Verne McFarland, 214-665-6617, Mail Code: 6SF-P
- State Coordinator (EPA): Joe Massey, 214-665-6617, Mail Code 6SF-LL
- Attorney (EPA): Mark Peycke, 214-665-2135, Mail Code: 6SF-DL
- **Prime Contractor:** U.S. Army Corps of Engineers (USACE)/IT-OHM Joint Venture

### **Cost Recovery:**

PRPs Identified: 1Viable PRP: 0

# Present Status and Issues —

- 1995 marked the culmination of EPA's accelerated/integrated efforts;
  - <u>February</u> site proposed to National Priorities List (NPL)
  - <u>March</u> Remedial Investigation/Feasibility Study/Environmental Engineering and Cost Analysis (RI/FS/EECA) completed, Proposed Plan for Pits issued
  - <u>April</u> Removal Action initiated to complete assessment of site; remove hot spots.
  - May Public comment period ended after 68 days and 4 community meetings, letter recommending final NPL placement from Governor Edwards received, site finalized on NPL. Incineration of the Southern Shipbuilding waste at the Bayou Bonfouca incinerator ended May 19, 1995.
  - <u>July</u> Record of Decision Signed, Remedial Design completed, Remedial Action initiated with signing of Interagency Agreement Grant (IAG) with the USACE.
  - August USACE contractors mobilize
  - September excavation of wastes begin, shakedown burn initiated
  - <u>December</u> Demonstration Burn completed
- 1996:
  - <u>January</u> Open House to discuss results of Demonstration Burn

- February & March Open Houses to discuss Remedial Investigation and Feasibility Study for OU#2
- <u>June</u> Removal Actions in OU2 were completed
- <u>September 30</u> Incineration Complete Approximately 67,000 cubic yards of hazardous waste was detoxified.
- <u>November</u> Ribbon Cutting Ceremony to celebrate completion of incineration activities.
- <u>December</u> Public Meeting for Proposed Final Plan for OUs 1 & 2.

### **Benefits**

EPA's actions at the Southern Shipbuilding site have demonstrated outstanding productivity, management skill, creativity, and community-based approaches to solve a major pollution problem in concert with the City of Slidell, Louisiana. By integrating all internal and external aspects of the program, the quality and speed promised in the Agency's Administrative Improvements/Reforms initiatives were fully demonstrated. The creative approach utilized at this site serves as an example of the kinds of improvements that can be made in Superfund nationwide.

In an 18 month period from January 1994 to July 1995, the Southern Shipbuilding Team succeeded in achieved as much progress as is normally accomplished by EPA in 10 years. During this period:

- <u>A Community Advisory Group was formed:</u> More than a dozen formal and informal meetings with concerned citizens and elected officials were held to shape site studies and remedy selection. In addition to a Technical Assistance Grant group, community associations and a Community Advisory Group were actively involved. The approach created mutual trust and the concept that EPA is a partner in solving community environmental problems. A striking measure of this community involvement is that an incineration remedy in the middle of the City received majority support from residents (and a unanimous endorsement by the City Council).
- <u>Accelerated the Superfund process with no decrease in quality of work products:</u> In a period of 18 months. EPA:
  - completed 3 stabilizing Removal Actions,
  - completed National Priorities List Site (NPL) evaluation (proposed February 1995, added to the NPL after receiving the endorsement of the Governor of Louisiana in June 1995),
  - completed a full evaluation of over 3,000 potential responsible parties (e.g. barge cleaning customers),
  - completed a total technical characterization of barge cleaning sludge lagoons including: full human health and ecological risk assessment, full Remedial Investigation, pilot tests of biological treatment and incineration, and evaluation of the technical feasibility of 10 remedial options,
  - completed formal remedy selection processes from the proposal of remedy in March,

1995 through a 60 day comment period with public meetings, to the signing of a Record of Decision on July 21, 1995,

- completed negotiations and received a signed Superfund State Contract on July 28, 1995,
- completed initial remedial design specifications,
- initiated Remedial Action under a July 28, 1995, interagency agreement with the U.S. Army Corps of Engineers,
- successfully completed incineration of 67,000 cubic yards of contaminated soils and sludges,
- investigated and remediated the remainder of the site,
- developed broad-based community support, and
- set the stage to redevelop the site and return the property to the city tax rolls.